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Board Independence and Asymmetric Timeliness of Earnings in a Bank-oriented Financial System: Evidence from Finland

Jari Kankaanpää

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Abstract

This study examines the link between the board independence and asymmetric timeliness of earnings in a bank-oriented financial system. The models by Basu (1997) and Ball & Shivakumar (2005) are re-estimated. This study extends prior research by Beekes et al. (2004), Ahmed & Duellman (2007) and Garcia Lara et al. (2007) and investigates the relationship between board compositions and asymmetric timeliness of earnings in civil law regime and capital markets, which are commonly considered more bank than market based. Such institutional settings exist among others, in Finland, Japan, Germany and Scandinavia.

The Finnish data serves well for this study because accounting quality in Finland is considered to be among the highest in the world. The estimation period 2003-2005 serves well for this study, because the renewed and highly detailed corporate governance recommendation for Finnish listed companies entered into force in December 2003.

The results obtained using the Basu model show that bad news (negative returns) are reflected in earnings on a more timely basis than good news (positive returns). In this respect the results are in line with earlier findings. Unexpectedly it was found that timeliness of bad news reporting does not depend on the number of independent directors, while the timeliness of good news reporting does. The result can be interpreted in such a way that independent directors do not directly increase the market reaction to good news (positive returns) but have an indirect effect by increasing the markets` credence in the board and their reporting. The results from the Ball & Shivakumar model indicate that, inconsistently with the Basu model, timely recognition of bad news (negative cash flows) over good news (positive cash flows) is statistically insignificant.

Keywords: Asymmetric timeliness, Bank Oriented Financial System, Board Independence, Corporate Governance, Earnings conservatism.

CONTENT

1. Introduction

The aim of this study is to examine the link between board independence and asymmetric timeliness of earnings in a bank oriented financial system. Bank orientation refers to the Finnish financial system in the 2000`s, where the banks` financial role is very important[1]. However, the restructuring process of the Finnish financial markets during the 90´s caused the banks to concentrate on financial services as their main source of revenue instead of power games for strategic ownerships in core companies (Moen & Lilja 2005; Federation of Finnish Financial Services 2007). The relationship (bank-group) based governance system spheres of influence withered away, and the systems of finance and governance became separated. Then the need for an investor oriented system of corporate governance regulation, for example, through board independence became essential.

Board independence refers to the proportion of board members having no relationship with the company that would or could be perceived to materially affect their decision-making (Leo et al. 2007). Since executive directors' careers are tied to the CEO, the monitoring role of the board is predicted to fall mainly on the independent board members. Thus, the role of independent directors is essential to the resolution of agency problems between managers and shareholders as well as shareholders and creditors (Berle & Means 1932; Coase 1937; Jensen & Meckling 1976; Smith & Warner 1979; Fama & Jensen 1983; Shleifer & Vishny 1997).

Stronger corporate governance, i.e. more independent directors on the board, is expected to result in more demand for timely information on earnings. Reported earnings are considered to be timely when they accurately reflect the information that has been incorporated by the market in its pricing of a firm's equity. In such cases reported earnings have a direct effect on price movements. This paper seeks anomalies with respect to full timeliness. In asymmetric timeliness, earnings are more sensitive to bad news (negative returns) than to good news (positive returns). This incremental timeliness of bad news recognition over good news recognition is at the root of Basu´s concept of earnings conservatism (Basu 1997; Watts 2003a; Bushman & Piotroski 2006).

The timely incorporation of favorable and especially unfavorable information in earnings facilitates effective monitoring of managers by the board of directors (Beekes et al. 2004). Moreover, the

[1] I thank Professors Michael Bamber (Terry College of Business, University of Georgia) and Petri Sahlström (Department of Accounting and Finance, University of Oulu) for rising up the issue of banks role in Finnish financial system and corporate governance.

board is also beneficial for other stakeholders and its duty is not only to monitor managers (The Finnish Company Act 6:2§). Acceleration in the recognition of bad news provides the board of directors with early warning signals to investigate the origin of bad news.

Prior empirical findings from the UK (Beekes et al. 2004), US (Ahmed & Duellman 2007) and Spain (Garcia Lara et al. 2007) indicate that firms with a higher proportion of independent board members report bad news in a timelier manner than good news. Moreover, international mainstream research highlights that conservative earnings reporting is most active in countries with market based financial systems and Anglo-Saxon common-law legal structure (e.g. Ball et al. 2000; Giner & Rees 2001; Garcia Lara & Mora 2004). In addition, country specific findings e.g. by Raonic et al. (2004); Bushman & Piotroski (2006) and Brown et al. (2006) also indicate asymmetrically timely recognition of bad news in civil law regime and markets, which are commonly seem to be more bank than market based, like Finland, Japan, Germany and Scandinavia.

The motivation of this study is twofold. First, extensive data including all sizes of listed firms from Finland are utilized. It is notable that prior empirical findings from Finnish markets (and also many other markets) are based on country specific findings from large international machine readable databases covering only the largest listed companies. By using hand collected and highly detailed data a better concept for separate markets is provided.

Second, corporate governance structure and especially the board of directors may be an important cause of asymmetric timeliness of earnings, also in markets like Finland. The globalization of business means that nearly all governance regimes share similar pressure for increased transparency and accountability. In that sense, conservative earnings reporting could be an effective monitoring tool for independent directors, also in civil law regimes and capital markets, which are commonly seem to be more bank than market based.

The Finnish data is highly appropriate for this study because the accounting quality in Finland is considered to be among the highest in the world[2]. The data is hand collected and very detailed from

[2] For example, based on the Corruption Perception Index (CPI) Finland were ranked in the top 2 during 2003-2005, indicating almost the lowest level of corruption in the world (Transparency International 2004, 2005 and 2006). Moreover, based on the Global Competitiveness Index (GCI) Finland was ranked top in 2003 and 2004 and was second in 2005 (Lopez & al. 2004, 2005 and 2006). It is reasonable to assume that the higher the overall level of business ethics, the higher the level of financial reporting quality, either because there is an accounting measure contained in the ranking criteria, or because the quality of accounting and business practice is highly correlated (Lindahl & Schadewitz 2009).

Finnish listed firms during the period 2003-2005. The period 2003-2005 serves very well for this study, because the renewed and highly detailed corporate governance recommendation for Finnish listed companies entered into force in December 2003. This recommendation sets very specific criteria for evaluating directors` independence (HEX[3] et al. 2003; OECD 2004), which is appropriate for this study.

Earnings conservatism is measured following Basu (1997) and Ball & Shivakumar (2005). The Basu (1997) model (hereafter Basu model) uses 12-month share returns as proxies for good and bad news. Under conservative earnings reporting, earnings have a higher sensitivity to bad news (negative returns) than to good news (positive returns). The Ball & Shivakumar (2005) model (hereafter Ball & Shivakumar model) is purely accounting based, but the intuition behind it is the same as in the Basu model: Accounting earnings tend to anticipate the recognition of bad news (negative cash flows) and to delay the recognition of good news (positive cash flows). Total accruals and cash flows are negatively associated, but this negative association, because of the asymmetric recognition of news in earnings, tends to be lower in periods with economic losses (Garcia Lara et al. 2007).

The results obtained using the Basu model show that bad news (negative returns) is reflected in earnings on a timelier basis than good news (positive returns). In this respect the results are in line with prior findings from Finnish data. Instead, it is unexpectedly found that timeliness of bad news reporting does not depend on the number of independent directors, but the timeliness of good news reporting does. In fact, the timeliness of good news reporting reaches its maximum when the whole board consists of independent directors. However, the result can also be interpreted in such a way that independent directors do not directly increase the market reaction to good news (positive returns) but has an indirect effect by increasing the markets` credence in the board and their reporting.

The result using the Ball & Shivakumar model shows that relations with discretionary accruals and cash flows are negative as expected, and that the relation is statistically significant. In addition, the relation between accruals and negative cash flows (bad news) is positive though statistically insignificant. Surprisingly, the firms with more independent directors have no direct or indirect reaction to negative cash flows (bad news) or positive cash flows (good news) reporting.

[3] Nowadays, HEX Plc is NASDAQ OMX Helsinki Ltd.

This study contributes to the existing literature in several ways. First, by using the Basu model this study confirms prior findings that in Finnish markets the speed of bad news recognition in earnings is higher than to good news recognition. In that sense the findings confirm that Finnish listed firms report earnings in a conservative manner. However, results based on the Ball & Shivakumar model this relation are not statistically significant. Second, contrary to the findings from the UK, US and Spanish markets, in Finnish markets credence in bad news reporting does not depend on board independence. Both models give support to this. Third, in the Finnish bank oriented financial system board independence increases the markets` credence in the board and their good news reporting. However, the relation between accruals and positive cash flows did not lend support to this phenomenon.

The remainder of the thesis is organized as follows. Section 2 discusses the theoretical background and develops hypotheses. Section 3 describes the research design. Section 4 introduces the sample and data. Section 5 presents the results. Section 6 summarizes the findings and outlines future research ideas.

2. Theoretical Background and Hypothesis Development

2.1. Finnish Corporate Governance in the Agency Theoretical Framework

2.1.1. Development of the Finnish Financial System and Investor Perspective Governance

In the framework of agency theory the fundamental question of corporate governance is how to assure financiers that they get their proportion of return on their financial investments (Berle & Means 1932; Coache 1937; Jensen & Meckling 1976; Fama & Jensen 1983; Shleifer & Vishny 1997). This investor perspective system of corporate governance is based on a philosophy of protection not only of shareholder (particularly minority) rights but also of debt holders` rights in public held firms (Shleifer & Vishny 1997; Letza 2004; Leo et al. 2007). Traditionally, the investor perspective system of corporate governance has been typical for market-based finance systems in contrast to relation based corporate governance in a bank based financial system. In bank based financial systems firms and banks feel little need to develop corporate governance mechanisms to protect investors` rights. Firms are willing to rely on banks to continue financing their projects and banks feel it convenient under explicit or implicit government guarantee.

Until the early 1990s, the bank based finance and relationship based governance system was typical for Finnish listed firms (Hyytinen et al. 2003; Moen & Lilja 2005; Liljeblom & Löflund 2006). The dominant logic of corporate governance in that financial system was based on long-term investments in capital intensive production, and it rested on a system of risk sharing between banks, corporations, and the state[4]. However, many changes took place in the 1990s[5]. In the late 1990s, equity issuance on the stock market by the non-financial firms clearly exceeded that of financial institutions[6].

[4] The state had a dual role. First, it was the owner of industrial enterprises in several capital intensive industries as well as of banks. Second, it had instruments for macroeconomic regulation. As a final resort to restore the competitiveness of Finnish firms, it could devalue the currency (Moen & Lilja 2001). When Finland decided to join the European Economic and Monetary Union (EMU), devaluations were taken out of the arsenal.

[5] For example, a banking crisis in the early 1990s led to a drastic reduction in banks' holdings of corporate equity. Moreover, the full opening of the stock market for foreign investors in 1993 quickly led to a rapid increase in foreign holdings from a level less than 10 % (1993) to a level of about 50 % in 2003 – 2005 (Nordic Central Securities Depository [NCSD] 2008). In addition, the Finnish government reduced it equity holdings, only maintaining larger stakes in a handful of listed firms (Moen & Lilja 2005; Liljeblom & Löflund 2006).

[6] For example, in the period 1995–2000, 55 new Finnish companies were listed on the Helsinki Stock of Exchange (Hyytinen et al. 2003).

Despite the development of Finnish financial markets from being bank-based towards a market orientation, the banks` financial role continues to be very important in Finland, also in the 2000´s. However, the restructuring process of the financial markets caused the banks to concentrate on financial services as their main source of revenue instead of power games for strategic ownerships in core companies (Moen & Lilja 2005; Federation of Finnish Financial Services 2007). Because relationship (bank-group) based governance system spheres of influence withered away, the need for a high quality investor perspective system of corporate governance regulation became essential. Especially, because typical foreign investors on the Finnish market follow Anglo-Saxon investment practices, pressures on the quality of governance in Finnish companies are present, for example, through board independence.

2.1.2. Framework of Corporate Governance Regulation in Finland

In Finland good corporate governance regulation consists of various factors (Securities Market Association 2009). There are both legal regulation and recommendations based on self-regulation. The legal regulation for Finnish corporate governance is primarily contained in the Finnish Companies Act, which is most closely related to the corresponding laws in the Scandinavian countries like Sweden, Denmark and Norway (Liljeblom & Löflund 2006). With respect to corporate governance, a central role is played by the annual general meeting (AGM). For example, the AGM typically nominates the board who in turn hires and fires the chief executive officer (CEO). Moreover, the regulatory body of Finnish corporate governance also includes the Securities Market Act, the Rules of the Helsinki Stock Exchange and Finnish Financial Supervision Authority governed by the Bank of Finland (Liljeblom & Löflund 2006). The Finnish Corporate Governance Code (CG Code) complements` the legislation and is in the form of *'Comply or Explain'*. This means that firms listed on the OMX are bound to follow this code to its full extent, but firms can deviate from the given recommendation by announcing the deviation with the required explanations[7].

The first Finnish CG Code was issued in 1997. However, the growing significance and international development of corporate governance practices contributed to amending the recommendations. A

[7] The aim of the code is to harmonise the practices of listed firms as well as the information given to shareholders and other investors. The code will also improve the transparency of administrative bodies, management remuneration and remuneration systems. It will also provide an overall picture of the central principles of the corporate governance system of Finnish listed firms and enhance the success of Finnish listed firms (Security Market Association 2009).

very detailed corporate governance code for listed companies was issued in December 2003 (OECD 2004; Commission of the European Communities 2007; Securities Market Association 2009).

The central features in the Finnish CG Code 2003 are requirements for independent (single) boards, support for the establishing of board committees such as audit, nomination and compensation committees, requirements to report on the organization of internal control, internal audit, and risk management functions of the firm, and various disclosure requirements. Moreover, firm management may not act as members of nomination or compensation committees. The recommendation does not approve the same person to be both the board chairman and CEO. In addition, the recommendation takes a negative view of a dual board structure (supervisory boards on top of regular boards) and recommends that, if such a board structure is in place, the role of the supervisory board should be restricted to be as narrow as possible. Finally, the recommendation states that a majority of the board members should be independent of the company, and in addition, at least two board members should be independent of the owners of more than 10 % of the equity or votes of the firm.

Although the 2003 recommendation has been seen to work well and to meet high standards internationally, new regulations alongside EU directives and recommendations created a need to update the code in 2008. In relation to board of directors, the new code states that the board will appoint the members of committees from among its own members. Moreover, the composition of boards of listed companies should include members of both genders, but this recommendation should be implemented only at annual general meetings by 2010[8].

2.1.3. The Concept of Independent Director in Corporate Governance

The board of directors represents the pinnacle of the decision-making hierarchy and control system in larger firms (Fama & Jensen 1983; Beekes & al. 2004). Although all directors on the board have equal powers (unless explicitly delegated otherwise by the board) effective boards have to separate the problems of decisions management and decisions control. In that sense, business practice and regulation refers to different types of directors: executive directors, non executive directors, grey directors and independent directors (Leo et al. 2007).

[8] For a detailed comparison between the 2003 and 2008 codes, see Security Market Association 2009.

Executive directors are full-time employees of the firm they govern and most often carry a title that signifies this, such as CEO. In contrast, non-executive directors (outside directors) do not work full time in the company, but they may hold several positions as executives of other organizations. Within the non-executive director classification, there is a subclassification of grey directors and independent directors. Grey directors are those who may, at times, experience a conflict of interest because of their positions with other organizations (e.g. as the manager of a supplier to the company or a partner in a professional services firm that works for the company). Instead, independent directors have no relationship with the company that would, or could be perceived to, materially affect their decision-making (Leo et al. 2007).

From the corporate governance point of view, there is no internationally prescribed form for the board members` independence criteria (OECD 2004). However, the subsections from (a) to (i) in recommendation 18 in the Finnish CG Code 2003[9] gives very specific criteria to evaluate a director's independence (HEX Plc et al. 2003). According to that code, a director is not independent of the company if the director

(a) has an employment relationship with company, or director holds a position in the company;
(b) has had an employment relationship or position in the company during the last three years prior to the inception of the board membership;
(c) receives from the company - or from a member of its operative management significant compensation for services or other advice not connected with the duties of the board, (e.g. the director works on consulting assignments for the company);
(d) belongs to the operative management of another company, and the two companies have a customer, supplier or co-operation relationship significant to the other company; or
(e) belongs to the operative management of another company whose director is a member of the operative management in the first company (interlocking control relationship).

In addition, the board can on the basis of its overall evaluation determine that a director is not independent of the company if the director

(f) participates in a performance-based or share-related compensation system of the company (However, the financial significance of the compensation system shall be taken into account);
(g) the company is aware of other factors that may compromise the independence of the director and he/she is ability to impartially represent all shareholders.

[9] In the 2008 updated code, that congruent recommendation is 15.

Furthermore, the criteria on which board members are determined not to be independent of significant shareholders of the company are given in subsections (h) and (i). Significant shareholder means a shareholding at least 10 % of all the shares or of the aggregate votes in the company. The code states, that the director is not independent of a significant shareholder of the company if

(h) he/she exercises dominant influence in the company such as referred to in the Finnish Companies Act, or has a relationship such as earlier referred to in sub-sections (a) and (b) to a party who exercises dominant influence in the company, or

(i) the director is a significant shareholder him/herself, or he/she has a relationship to a significant shareholder of the company such as referred to in sub-sections (a) and (b)[10].

Finally recommendation 18 states that in all situations, when evaluating independence, the circumstances of private individuals or legal entities closely affiliated to the member, such as referred to in the Finnish companies law, shall also be taken into consideration.

[10] Moreover, according to the 2008 code the director is not independent of the company or significant shareholder if the director has been a non-executive director for more than 12 consecutive years. In addition, the director is not independent of the company if he or she has been in the past three years the auditor of the company, a partner or an employee of the present auditor or the director is a partner or an employee in an audit firm that has been the company's auditor in the past three years.

2.2. Asymmetric Timeliness

2.2.1. Timeliness and Earnings Conservatism

Reported earnings are considered to be timely when they fully reflect the information that has been incorporated by the market in its pricing of a firm's equity (Basu 1997). In such cases reported earnings have a direct effect on price movements. However, earnings and prices tend to reflect bad news simultaneously, while prices reflect good news faster than accounting earnings. This asymmetric timeliness of earnings is at the root of Basu´s concept of earnings conservatism[11]: The incremental timeliness of bad news recognition over good news recognition.

Earnings conservatism can be also thought of as the speed of bad news (losses) recognition in earnings relative to the speed of good news (gains) recognition in earnings (Bushman & Piotroski 2006). To see this definition clearly, let (G) be the speed of good news recognition and (I) the incremental speed of bad news recognition. Then, the speed of bad news recognition (B) is specified as:

$$B = G + I \tag{1}$$

Equally, earnings conservatism is specified as:

$$\frac{B}{G} = \frac{(G+I)}{G} = 1 + \frac{I}{G} \tag{2}$$

Then Equation (2) implies that earnings conservatism increases, for example, by increasing the incremental speed of bad news recognition (I) and holding the speed of good news recognition constant (G). Alternatively, earnings conservatism increases by decreasing the speed of good news recognition (G) holding the incremental speed of bad news recognition (B) constant. Finally, it is possible to slow the speed of good news recognition (G) and simultaneously increase the speed of bad news (B) recognition (Bushman & Piotroski 2006).

[11] Also labelled income conservatism (Basu 1997; Ball et al. 2000), news dependent conservatism (Chandra et al. 2004), conditional conservatism (Ball & Shivakumar 2005; Beaver & Ryan 2005) or ex-post conservatism (Pope & Walker 2003; Richardson & Tinaikar 2004).

Earnings conservatism has many economic functions (Watts 2003a; Gassen & al. 2006). From the point of view of contracting, earnings conservatism can be used in contracts among the different parties to the firm to reduce moral hazard problems created by the information asymmetries. Contracts based on conservative numbers reduce the probability of managerial expropriation of shareholders' resources or of excessive distribution of resources to the shareholders at the expense of debt-holders. Due to these beneficial effects, conservatism is commonly considered an indicator of earnings quality or a desirable property of accounting earnings (Ball et al. 2000; Watts 2003b; Francis et al. 2004; Ball & Shivakumar 2005).

2.2.2. International Findings Related to Asymmetric Timeliness

International differences in asymmetric timeliness of earnings and conservative reporting practices have been linked to differences in regulatory infrastructures and the nature of their capital markets (Ryan 2006)[12]. Prior studies indicate that firms in countries with strong investor protection and high quality judicial systems reflect bad news in reported earnings numbers in a more timely manner than firms in countries with weak investor protections and low quality judicial systems (Bushman & Piotroski 2006). International mainstream research especially highlights that demand for conservative earnings reporting is typical for countries with code law legal structures and market based financial systems (e.g. Ball et al. 2000; Giner & Rees, 2001; Garcia Lara & Mora 2004).

However, country specific findings from prior studies indicate asymmetrically timely recognition of bad news also in civil law regimes and markets which are commonly considered more bank than market based like Finland, Japan, Germany and Scandinavia (Raonic et al. 2004; Bushman & Piotroski 2006; Brown et al. 2006). Based on their country specific findings, Bushman & Piotroski (2006) report that e.g. in Finland, the speed of bad news recognition is about 19 times higher relative to good news recognition.[13] In addition, Brown et al. (2006) found a positive coefficient with earnings asymmetric of bad news (0.22) in Finnish listed firms as well.[14]

[12] Ryan (2006, 514-515) has an extensive typology of international earnings conservatism research.

[13] For Finnish firms the coefficients with earnings and good news were (0.006) and earnings and bad news (0.110). The sensitivity to bad news relating to good news is calculated as follows: (0.006 + 0.110)/ (0.006) = 19.333. Moreover, the sensitivity to bad news relating to good news is 9.231 in Japan, 7.286 in Germany, 12.302 in Sweden, 14.500 in Norway and 7.256 in Denmark (More country specific findings, see Bushman & Piotroski 2006, page 121 and table 2).

[14] That coefficient is also positive for firms from Japan (0.08), Germany (0.19), Sweden (0.26), Norway (0.29) and Denmark (0.16) (See Brown et al. 2006, Table 3 in page 614).

On the other hand the variation of earnings conservatism is also linked to differences in corporate governances. For example, prior empirical findings from Anglo-Saxon market based financial systems and common law regimes in the UK (Beeches & al. 2004) and US (Ahmed & Dolman 2007) indicate that firms with a higher proportion of independent board members report bad news in a more timely manner than good news. Moreover, Garcia Lara et al. (2007) report similar findings even from the Spanish market, which is a civil law regime and has not commonly been viewed as a typical market based financial system.

2.3. Complementary Relation between Board Monitoring and Earnings Conservatism

The board of directors sees to the administration of the company and the appropriate organization of its operations (The Finnish Company Act 6:2§). Moreover, the board is created to monitor management and it is responsible for the appropriate arrangement of the control of the company accounts and finances. Since executive and grey directors' careers are tied to the CEO, the task of arranging of the control is likely to fall mainly on the independent board members. Then the role of independent directors is essential for the resolution of agency problems between managers and financiers as well as shareholders and creditors (Beekes et al. 2004; Ahmed & Duellman 2007).

The timely incorporation of both favorable and especially unfavorable information in earnings facilitates effective monitoring of managers by the board of directors and external investors (Beekes et al. 2004). The acceleration in the recognition of bad news provides the board of directors with early warning signals to investigate the origin of bad news (Garcia Lara et al. 2007). Stronger corporate governance, i.e. more independent directors on the board, is expected to result in a higher demand for timely information and to prevent managers from hiding less favorable information.

In light of the arguments above, earnings conservatism is a potentially useful tool for independent directors fulfilling their role of ratifying and monitoring key decisions on a company board (Beekes et al. 2004). Thus boards with more independent directors have a propensity for greater monitoring and are therefore expected to insist on greater earnings conservatism. By contrast, firms with poor governance structures (i.e. fewer independent directors) may be less inclined to monitor, resulting in a greater propensity to delay the recognition of bad news (Beekes et al. 2004). Based upon this, the following hypothesis is tested:

Hypothesis 1: *Ceteris paribus, the timeliness of bad news reflected in earnings is positively related to the proportion of independent directors on the board.*

On the other hand, inside directors may have incentives to accelerate good news in earnings for opportunistic reasons, for example to enhance the value of their compensation (Healy 1985; see also Beekes et al. 2004). Executive directors have a primary allegiance to the CEO. Moreover, executive and also grey directors depend on the CEO for continued employment within the organization. Therefore their incentives to monitor are considerably weaker than those of independent directors. Moreover, independent directors do not typically share in the benefits of such activities. On the contrary, they risk loss of reputation on the labor market in the event of earnings being subsequently shown to be overstated (Fama, 1980; see also: Beekes et al. 2004). Hence there are strong incentives for independent directors to monitor earnings timeliness.

Given that inside directors may be more inclined to use aggressive income-recognition techniques to accelerate the effect of good news, the following hypothesis is also tested:

Hypothesis 2*: Ceteris paribus, the timeliness of good news reflected in earnings is negatively related to the proportion of independent board of directors.*

3. Research Design

3.1. Asymmetric Timeliness Model

Following prior work in this area[15], my research design uses the Basu (1997) reverse-regression model between earnings and contemporaneous returns (Beaver et al. 1980; Beekes et al. 2004). Following Basu (1997) yearly market returns (RET_t) are used as a proxy for the existence of news about a firm's performance that is publicly available. It is calculated as logarithmic annual market return including dividends $RET_t = \ln(P_t) - \ln(P_{t-1})$. Yearly earnings ($E_t$) are measured per share and controlled for heteroscedasticity by scaling with prior year-end price giving E_t/P_{t-1}. For simplicity of notation, subscripts are not always used in the sequel.

The Basu model incorporates a dummy variable for negative returns (NEG), which interacts with the returns variable (RET) to proxy for bad news (NEG·RET). The coefficient for (RET) shows the overall impact of returns to earnings and the coefficient for (NEG·RET) the difference in slopes for positive and negative earnings. The standard asymmetric timeliness model by Basu (1997) is specified as follows:

$$E_{i,t} / P_{i,t-1} = \beta_0 + \beta_1 NEG_{i,t} + \beta_2 RET_{i,t} + \beta_3 NEG_{i.t} \cdot RET_{i,t} + \varepsilon_{i,t} \qquad (3)$$

In the Equation (3), β_3 captures the incremental speed of bad news recognition in earnings relative to the speed of good news recognition β_2. If $\beta_3 = 0$, there is no difference between the speed of good news and bad news recognition, and so β_2 captures the speed with which news in general is recognized. However, if $\beta_3 \neq 0$, then β_2 captures the speed of good news recognition, β_3 the incremental speed of bad news recognition relative to good news recognition, and $(\beta_2 + \beta_3)$ the speed of bad news recognition (Basu 1997; Bushman & Piotroski 2006), both β_2 and β_3 are expected to be positive in sign. The intercept coefficient β_0 in Equation (3) will reflect the impact of prior years´ good news on current period earnings and is anticipated to be positive in sign. In addition, β_1 is the marginal change in the intercept of negative return cases, but there is no expectation for the sign or value of (NEG).

[15] See for example: Pope & Walker (1999); Ball et al. (2000), Giner & Rees (2001), Beekes et al. (2004), Raonic et al. (2004), Garcia Lara & Mora (2004), Bushman & Piotroski (2006) and Brown et al. (2006). For more empirical work relating to asymmetric timeliness, see Ryan (2006, pages 514-515).

The model (3) can be reformulated in a mathematically equivalent form:

$$E_{i,t} / P_{i,t-1} = \beta_0 + \beta_1 NEG_{i,t} + \beta_3 NEG_{i.t} \cdot RET_{i,t} + \beta_4 POS_{i,t} \cdot RET_{i,t} + \varepsilon_{i,t} \quad (4)$$

In Equation (4), POS = 1 – NEG is a proxy for good news. Now, in Equation (4), β_3 is exactly the same as in (3) and shows the speed of recognition of bad news in earnings, β_4 in turn shows the speed of good news recognition. Both β_3 and β_4 are expected to have a positive sign. Equations (3) and (4) are exactly equivalent to $\beta_4 = \beta_2 + \beta_3$. On some occasions, however, the formulation (4) is more informative than formulation (3).

3.2. Modeling Asymmetric Timeliness and Board Independence

Beekes et al. (2004), Ahmed & Duellman (2007) and Garcia Lara et al. (2007) extend the Basu (1997) model to examine the link between asymmetric timeliness and board composition. With a larger proportion of independent directors it will be possible to better monitor company activities and adopt a conservative earnings reporting tendency due to a greater presence of independent directors (Beekes et al. 2004; Ahmed & Duellman 2007; Garcia Lara et al. 2007). Under conservatism, earnings have a higher sensitivity to bad news than to good news. Thus, firms with higher independent director representation on the board are anticipated to incorporate bad news into earnings on a timelier basis. Conversely, firms with fewer independent directors are anticipated to be less inclined towards bad news reporting. This link is tested by incorporating a continuous variable for the proportion of independent directors (INDEP) to the model. This variable is then interacted with variables in the standard Basu model as shown in Equation (5):

$$\begin{aligned} E_{i,t} / P_{i,t-1} = {} & \gamma_0 + \gamma_1 NEG_{i,t} + \gamma_2 RET_{i,t} + \gamma_3 NEG_{i,t} \cdot RET_{i,t} \\ & + \gamma_5 INDEP_{i,t} + \gamma_6 NEG_{i,t} \cdot INDEP_{i,t} + \gamma_7 RET_{i,t} \cdot INDEP_{i,t} \\ & + \gamma_8 NEG_{i,t} \cdot RET_{i,t} \cdot INDEP_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (5)$$

In model (5), γ_3 (NEG·RET) captures the sensitivity to bad news (exclusive of the effect of good news) without the effect of independent directors, while γ_8 (NEG·RET·INDEP) captures the marginal effect of the proportion of independent directors. Parameter γ_5 (INDEP) captures the pure marginal effect of independent directors and γ_6 (NEG·INDEP) the differences of that effect on the

bad news and good news reporting. The sign for γ_3 is predicted to be positive, but there are no expectations for the signs of γ_5 and γ_6. However, Hypothesis 1 predicts that firms with a greater proportion of independent directors will report earnings more conservatively than firms with a smaller proportion of independent directors. This is expected to be represented in a significant positive coefficient on the γ_8 (NEG·RET·INDEP) interaction term.

Distinguishing between good and bad news scenarios could be crucial to understanding how the board affects earnings reporting. The difference in reporting timeliness is not expected to be limited to bad news (Beekes et al. 2004). Thus, under conservative earnings reporting, good news will be reflected in earnings over a number of periods and accounting will be less timely than for bad news. There may be a natural tendency for executive directors to emphasize available good news for their own bonus and promotional prospects. However, as Beekes et al. (2004) point out, the firms with more independent directors will adopt a conservative approach to recording good news in earnings, because of the greater constraint placed on managers' opportunism.

Relative to firms with high independent directors, firms with a lower proportion of independent directors are expected to recognize current period good news more aggressively in current period earnings (Beekes et al. 2004). Hypothesis 2 therefore predicts a more conservative approach to the recognition of good news on earnings by boards with a larger proportion of independent directors. In Equation (5), the timeliness of good news is captured by the coefficient on γ_2 (RET) without effect of independent directors and it is expected to be positive in sign. Conversely, the coefficient of the interaction term γ_7 (RET· INDEP) captures the marginal timeliness effect of the proportion of independent directors. Hence, if firms with a lower fraction of independent directors are aggressive reporters, the coefficient γ_2 will be significantly greater than ($\gamma_2 + \gamma_7$) and therefore γ_7 will be negative and statistically significant (Beekes et al. 2004).

In line with reformulation of model (3), model (5) can also be reformulated in a mathematically equivalent form as follows:

$$\begin{aligned} E_{i,t} / P_{i,t-1} \;=\; & \gamma_0 + \gamma_1 NEG_{i,t} + \gamma_3 NEG_{i,t} \cdot RET_{i,t} + \gamma_4 POS_{i,t} \cdot RET_{i,t} \\ & + \gamma_5 INDEP_{i,t} + \gamma_6 NEG_{i,t} \cdot INDEP_{i,t} \\ & + \gamma_8 NEG_{i,t} \cdot RET_{i,t} \cdot INDEP_{i,t} \\ & + \gamma_9 POS_{i,t} \cdot RET_{i,t} \cdot INDEP_{i,t} + \varepsilon_{i,t} \end{aligned} \tag{6}$$

In Equation (6), γ_3 (NEG·RET) shows the speed of bad news recognition in earnings without the effect of independent directors and γ_8 (NEG·RET·INDEP) with the effect of independent directors. Likewise, γ_4 (POS·RET) shows the speed of good news recognition in earnings without the effect of independent directors and γ_9 (POS·RET·INDEP) with the effect. Parameter γ_9 is expected to be negative in sign. On some occasions the formulation (6) is more informative than formulation (5). Here again formulation (5) and (6) are equivalent to $\gamma_4 = \gamma_2 + \gamma_3$.

3.3. Accruals- based Measure of Earnings Conservatism

For sensitively checking an alternative measure to the Basu conservatism model, the Ball & Shivakumar (2005), is used. The reason for using an alternative measure is that concerns have been raised in the literature about the use of asymmetric timeliness of earnings as a conservatism measure (Gassen 2006; Dietrich 2007). In particular Dietrich et al. (2007) show that portioning a regression sample with one of the regressor may produce biased inferences. On the other hand, Ryan (2006) argues that the biases introduced by the Basu approach are likely to be small. Moreover, using cumulating returns over the fiscal year (as is done in this paper), partially removes the impact of the annual earnings announcement on stock prices, which occurs several months after closing (see also Garcia Lara et al. 2007). Finally, Ryan (2006) concludes that asymmetric timeliness of losses is still the best measure of earnings conservatism.

The Ball & Shivarkumar model of conservatism is accounting based and overcomes most of the limitations of the Basu approach (Dietrich et al. 2007; Garcia Lara et al. 2007). The intuition behind that model is the same as in the Basu model: Accounting earnings tend to anticipate the recognition of bad news and to delay the recognition of good news (Garcia Lara & al. 2007). Total accruals and cash flows are negatively associated, but this negative association, because of the asymmetric recognition of news in earnings, tends to be lower in periods with economic losses[16].

Ball & Shivakumar (2005) use the following regression to measure this association between cash flows and accruals:

[16] Total accruals recognize the impact of negative economic events in the period in which they take place. However, negative effects tend to affect cash flows faster than positive effects. This asymmetry lowers the negative correlation between cash flows and accruals (Garcia Lara et al. 2007).

$$ACC_{i,t} = \delta_0 + \delta_1 D_{i,t} + \delta_2 CF_{i,t} + \delta_3 D_{i.t} \cdot CF_{i,t} + \mu_{i,t} \quad (7)$$

where (ACC) are total accruals scaled by beginning-of-period total assets, (CF) is operating cash flows scaled by beginning-of-period total assets, (D) is a dummy variable that takes a value of 1 if cash flow is negative and otherwise 0. It captures the occasions when economic losses occurred during the period i.e. in the situations when cash flows are negative. Equation (7), δ_2 is expected to be significantly negative, reflecting the negative association between cash flows and accruals. However, δ_3 is expected to be positive, indicating a reduction in the negative relation between accruals and cash flows. In line with Ball & Shivakumar (2005), there is no prediction for the intercept δ_0 or the dummy variable δ_1.

Following reformulation of model (3), model (7) can be also reformulated in a mathematically equivalent form:

$$ACC_{i,t} = \delta_0 + \delta_1 D_{i,t} + \delta_3 D_{i.t} \cdot CF_{i,t} + \delta_4 P_{i,t} \cdot CF_{i,t} + \mu_{i,t} \quad (8)$$

In Equation (8), P = 1 – D. Now, in Equation (8), δ_3 captures the speed of negative cash flows recognition in accruals and δ_4 the speed of positive cash flows recognition in accruals. Parameter δ_3 is expected to be positive and δ_4 negative in sign. On some occasions formulation (8) is more informative than formulation (7).

3.4. Board Independence and Accruals- based Earnings Conservatism

For sensitivity checking, Garcia Lara et al. (2007) use the Ball & Shivakumar model to analyze the differences in earnings conservatism across board structures[17]. Following that, a continuous variable (INDEP) is incorporated into model (7) as a proxy for the proportion of the independent directors as follows:

$$\begin{aligned} ACC_{i,t} &= \eta_0 + \eta_1 D_{i,t} + \eta_2 CF_{i,t} + \eta_3 D_{i,t} \cdot CF_{i,t} \\ &+ \eta_5 INDEP_{i,t} + \eta_6 D_{i,t} \cdot INDEP_{i,t} + \eta_7 CF_{i,t} \cdot INDEP_{i,t} \\ &+ \eta_8 D_{i,t} \cdot CF_{i,t} \cdot INDEP_{i,t} + \mu_{i,t} \end{aligned} \quad (9)$$

[17] Garcia Lara et al. (2007) report that results by using Ball & Shivarkumar model were in line with using Basu results: strong corporate governance firms report earnings more conservative than weak governance firms.

In model (9), the positive cash flow is captured by the coefficient on η_2 (CF) without effect of independent directors. Parameter η_2 is expected to be negative in sign. Moreover, interaction η_3 (D·CF) captures the sensitivity of negative cash flows exclusive of the effect of independent directors. The coefficient η_3 is predicted to be positive indicating a reduction in the negative relation between accruals and cash flows.

Analogously with model (5) term η_5 (INDEP) captures the pure marginal effect of independent directors and η_6 (D·INDEP) the differences of that effect on the negative cash flows (bad news) and positive cash flows (good news) reporting. There are no expectations for the signs of η_5 and η_6. The coefficient on the interaction term η_7 (CF·INDEP) captures the marginal effect of the proportion of independent directors. Then, if firms with a higher proportion of independent directors report positive cash flows in a less timely manner, the coefficient η_7 should be significantly negative. The coefficient on interaction variable η_8 (D·CF·INDEP), captures the marginal effect of the proportion of independent directors. If firms with a higher fraction of independent directors report negative cash flows in a more timely manner, this is expected to be represented in a significant positive coefficient η_8.

In line with the reformulation of model (5), model (9) can be reformulated in a mathematically equivalent form as follows:

$$\begin{aligned} ACC_{i,t} = {} & \eta_0 + \eta_1 D_{i,t} + \eta_3 D_{i,t} \cdot CF_{i,t} + \eta_4 P_{i,t} \cdot CF_{i,t} \\ & + \eta_5 INDEP_{i,t} + \eta_6 D_{i,t} \cdot INDEP_{i,t} \\ & + \eta_8 D_{i,t} \cdot CF_{i,t} \cdot INDEP_{i,t} + \eta_9 P_{i,t} \cdot CF_{i,t} \cdot INDEP_{i,t} + \mu_{i,t} \end{aligned} \tag{10}$$

In Equation (10), η_3 (D·CF) shows the speed of negative cash flow recognition in accruals without the effect of independent directors and η_8 (D·CF·INDEP) with the effect of independent directors. Equally, η_4 (P·CF) shows the speed of positive cash flows recognition in accruals without the effect of independent directors and η_9 (P·CF·INDEP) with the independent directors. The parameter η_9 is expected to be negative in sign. On some occasions formulation (10) is more informative than formulation (9).

4. Sample Construction and Data

The sample consists of all December fiscal year-end non-financial Finnish (headquarter in Finland) OMX- listed firms from 2003 to 2005. December year-ends are used to ensure that all companies are subject to similar market conditions. Financial firms are excluded because of the different accounting practices (see e.g. Ahmed & Duellman 2007; Garcia Lara et al. 2007).

The Finnish data serves well for this study for two specific reasons: First, Finland has very low levels of corruption and its firms operate in a legal environment in which there is widespread respect for contracts and the rule of law (e.g. Transparency International 2005). It is reasonable to assume that the higher the overall level of business ethics, the higher the level of financial reporting quality, either because there is an accounting measure contained in the ranking criteria, or because the quality of accounting and business practice is highly correlated (Lindahl & Schadewitz 2009). In that sense, accounting quality in Finland is one of the best in the world[18]. Second, the Corporate Governance Code for Finnish listed firms is very detailed by international standards (OECD 2004; European Corporate Governance Institute 2009; Securities Market Association 2009). It sets very specific criteria for evaluating directors' independence. That code was issued in December 2003, so the period 2003-2005 is suitable for this study.

The data were hand collected from various official, publicly available sources, primarily from annual reports and firms` web pages. Supplementary resources were the web pages of OMX group and the yearbook "Listed Companies in Finland", which relies on data from the Finnish Central Depository or the firm's depository register. In 2003 and 2004 financial statement information is reported and calculated in accordance with FAS, excluding 3 firms in 2003 and 8 firms in 2004, which report only IFRS numbers. In 2005 all firms in the sample have reported in accordance with IFRS because the European Union (EU) requires that as of 2005 all listed firms in EU should prepare financial statements under IFRS[19]. The summary of the sample is given in Table 1.

[18] For example, based on the Corruption Perception Index (CPI) Finland was in the top 2 during the period 2003-2005 indicating almost the lowest level of corruption in the world (Transparency International 2004, 2005 and 2006). Moreover, based on The Global Competitiveness Index (GCI) Finland tops the ranking in 2003 and 2004 and was second in 2005 (Lopez et al. 2004, 2005 and 2006).

[19] IFRS emphasizes the importance of fair value accounting, which essentially demands symmetric timeliness of earnings, i.e. both good and bad news should be reported in a timely manner. In addition, Lantto & Sahlström (2008) report that the adoption of IFRS by Finnish listed companies during 2002-2004 considerably increases the income statement profit. Thus it is reasonable to assume that IFRS adoption could lower the asymmetric timeliness of earnings in this sample. However, the purpose of this study is to examine the link between board independence and asymmetric timeliness not the increase or decrease of conservatism level between the years. Moreover, I use a pooled regression sample not panel methods because the purpose is not to compare firms with each

Table 1
Summary of the sample

(A) Sample selection of Finnish listed firms from 2003 to 2005		
Number of Finnish listed firm years from 2003 to 2005	410	
Financial services and insurance firms	-58	
Financial year differs from calendar year	-25	
Missing annual report data	-11	
Sample with all necessary accounting and market data	316	
Corporate governance reporting did not meet all the data reguirements	-113	
Influential outlier	-1	
Final Sample	202	
(B) Sample firm breakdown by industry		
Materials	25	12.4 %
Industrial	60	29.4 %
Consumer Discretionary	33	16.3 %
Consumer Staples	13	6.4 %
Health Care	7	3.5 %
Information Technology	58	28.7 %
Telecommunication Services	3	1.5 %
Utilities	3	1.5 %

In Table 1 panel A presents a summary of how the final sample was obtained[20]. Of the 410 Finnish listed firms in the sample 58 firm–years are eliminated in the financial services and insurance industries. Moreover, 25 firm–years are eliminated because the financial year differs from the calendar year and 11 firm-years due to missing annual report data[21]. Thus, the sample with all necessary accounting and market data consists of 316 firm-year observations. In addition, 113 firm-year observations are excluded because corporate governance reporting does not meet all the data requirements for the purpose of this study. To control for the effects of influential outliers, it is justified to delete one observation from the sample on the basis of the total accruals and cash flows[22]. Thus, the final sample consists of 202 observations for 100 distinct firms. The distribution of the sample firms

other. Then it is reasonable to assume that differences with accounting standards between the years are not a significant problem for this study.

[20] Detailed description of data selection process is presented in appendixes A an B.

[21] Firms with missing annual reports were typically those with mergers during the financial year.

[22] That observation has total accruals scaled by total assets 2.399 (more than 7 times higher that the second largest observation value 0.305 in Table 3) and scaled cash flows from operations -3.068 (more than 14 times lower than the second lowest value -0.213). That observation was then justifiably classified as an outlier and excluded from the sample.

across years is as follows: 20 firms are included in only one year, 58 firms are included in two years and 22 firms have data for each of the sample years.

Table 1 panel B presents the industry breakdown of the sample firms in accordance with the Global Industry Classification Standard (GICS). The largest industry is industrial with 60 firm-year observations, representing 29.7 % of the sample. Moreover, information technology with 58 firm-year observations represents 28.7 % of the sample.

Table 2
Variable definitions

E/P	Earnings per share after extraordinary items divided by beginning-of-period share price
RET	Logarithmic annual buy-and-hold return
NEG	Dummy variable coded 1 if RET negative, otherwise 0
POS	Dummy variable which equals 1 - NEG. Coded 1 if RET positive, otherwise 0.
NEG·RET	Logarithmic annual buy-and-hold return for bad news (negative return)
POS·RET	Logarithmic annual buy-and-hold return for good news (positive return)
INDEP	Proportion of board members independent of the company
ACC	Total accruals scaled by total asset at the beginning-of-period
CF	Cash flows from operations scaled by beginning of period total assets
D	Dummy variable coded 1 if CF negative, otherwise 0
P	Dummy variable which equals 1 - D. Coded 1 if CF positive, otherwise 0.
D·CF	Negative cash flows from operations scaled by beginning-of-period total assets
P·CF	Positive cash flows from operations scaled by beginning-of-period total assets

A summary of variable definitions is presented in Table 2. To control for heteroscedasticity, earnings are measured per share and deflated by the prior year-end stock price. In addition, return is annual logarithmic share return including dividends[23]. Moreover, following Ball & Shivakumar (2005) both accruals and cash from operations are standardized by beginning of period total assets. As a further control for autocorrelation and heteroscedasticity, Newey - West autocorrelation and White heteroscedasticity corrected t-values are used in hypothesis testing (White 1980).

[23]Calculated as follows: $\ln(P_t + \text{dividends paid in year } t) - \ln(P_{t-1})$.

Table 3

Descriptive statistics for dependent and independent variables for the sample of 202 firm-year observation over the period 2003 – 2005

(A) Continuous variables

	Mean	Std.dev.	Min	25 %	Median	75 %	Max
E/P	0.053	0.149	-0.656	0.040	0.068	0.102	0.956
RET	0.101	0.135	-0.242	0.023	0.093	0.185	0.575
NEG·RET	-0.076	0.062	-0.242	-0.120	-0.063	-0.026	-0.001
POS·RET	0.150	0.105	0.001	0.071	0.125	0.217	0.575
INDEP	0.723	0.235	0.000	0.571	0.800	0.900	1.000
ACC	-0.061	0.110	-0.835	-0.109	-0.054	-0.001	0.305
CF	0.144	0.122	-0.213	0.069	0.127	0.224	0.542
D·CF	-0.057	0.063	-0.213	-0.089	-0.032	-0.011	-0.001
P·CF	0.168	0.103	0.005	0.092	0.143	0.239	0.542

(B) Dichotomy variables

	Firm years	Percentage of Sample
Negative returns (NEG):	44	21.8 %
Negative cash flows (D):	22	10.9 %

Panel A in Table 3 shows that the median of reported earnings is above the mean, so the earnings are negatively skewed. It indicates asymmetric timeliness of earnings, i.e. conservative earnings reporting. In addition, accruals are on average negative due to the effect of amortization and depreciation.

Panel B in Table 3 shows that on average 72.3 % of the directors are independent. The proportion of independent directors in this sample is substantially higher than the UK sample (43.9 %) or Spanish sample (36.0 %) but slightly lower than in the US sample (77.5 %)[24]. This rather high level of independent directors on boards indicates that Finnish listed firms are keen on board independence and high-level corporate governance.

[24] UK sample Beekes et al. (2004), Spanish sample Garcia Lara et al. (2007) and US sample Ahmed & Duellman (2007).

5. Results

5.1. Asymmetric Timeliness

The estimation the results of the standard Basu models are given in Table 4. The results of estimating model (1) standard Basu show that the dummy variable for bad news (NEG) is statistically insignificant. It indicates that the slopes of good news (RET) and bad news (NEG·RET) intersect when the (RET) is 0. In order to guarantee this, in model (2a) the regression coefficient β_1 of the dummy variable (NEG) is set at 0.

The results from model (2a) show that the parameters (RET) and (NEG·RET) are statistically significant and have the predicted sign. The slope coefficient for negative returns is higher (0.967) than the slope coefficient for positive returns (0.351). Consistent with my expectation that bad news are reflected in earnings on a more timely basis than good news, the result in model (2a) shows, that the sensitivity of earnings to bad news is 3.755[25] times steeper than that for good news. It gives an indication that under the standard Basu interpretation of conservatism, Finnish listed firms report earnings in a conservatively manner. Model (2a) may be reformulated as model (2b), where a different coefficient for positive and negative returns is calculated. The return for negative earnings in model (2b) is (1.318) as can be concluded from model (2a) because the models are mathematically equivalent[26].

5.2. Effect of Board Composition on Asymmetric Timeliness

The standard Basu model was then modified by introducing a continuous variable (INDEP), which is the proportion of independent directors. It is used to link asymmetric timeliness and board composition. The estimation the results of the modified Basu models are given in Table 5. In model (3) the effect on independent directors (INDEP) and its interaction with bad news (NEG·INDEP) are incorporated into the model. The slope coefficient for negative returns (0.927) and for positive returns (0.339) remains very close to the coefficient in the model (2a). The coefficient of (INDEP) is significant and positive, though small, showing that independent directors have a positive effect on the market reaction to reported earnings. However, the coefficient (NEG·INDEP) is insignificant.

[25] [=0.351 + 0.967)/0.351]

[26] See model (2a): (RET) + (NEG·RET) = 0.351 + 0.967 = 1.318.

Table 4
Asymmetric timeliness coefficients, adjusted R² and F-statistics of standard Basu models

	β_0	β_1	β_2	β_3	β_4			
Dependent variable: E/P								
Independent variables:	INTERCEPT	NEG	RET	NEG·RET	POS·RET	Adj. R²	F	N
Ex. Sign	(+)	(?)	(+)	(+)	(+)			
Model 1	**0,044**	-0,041	**0,305**	0,769		0,285	***(27,73)****	202
	(4,12)*	(-1,23)	***(3,26)****	(1,76)				
Model 2a	**0,034**		**0,351**	**0,967**		0,284	***(40,84)****	202
	(3,19)*		***(3,96)****	**(2,47)***				
Model 2b	**0,034**			**1,318**	**0,351**	0,284	***(40,84)****	202
	(3,19)*			***(3,66)****	***(3,96)****			

Bold (*) indicates significance at 5 % confidence level
Italic bold (**) indicates significance at 1 % confidence level

Table 5

Coefficients, adjusted R^2 s and F-statistics of modified Basu models, where asymmetric timeliness and board composition are linked to using a continuous variable (INDEP) for the proportion of independent directors

Dependent variable: E/P	γ_0	γ_1	γ_2	γ_3	γ_4	γ_5	γ_6	γ_7	γ_8	γ_9			
Independent variables:	INTERCEPT	NEG	RET	NEG·RET	POS·RET	INDEP	NEG·INDEP	RET·INDEP	NEG·RET·INDEP	POS·RET·INDEP	Adj. R^2	*F*	*N*
Ex. Sign	(+)	0	(+)	(+)	(+)	(?)	(?)	(-)	(+)	(-)			
Model 3	-0.025 (-0.94)		**0.339** ***(3.85)***	0.927 (1.92)		**0.086** ***(2.73)***	-0.014 (-0.28)				0.295	***(22.01)***	202
Model 4	0.047 (1.34)		-0.093 (-0.386)	2.714 (1.88)		-0.009 (-0.20)	-0.033 (-0.67)	0.572 (1.85)	-2.491 (-1.39)		0.301	***(15.46)***	202
Model 5a	**0.035** ***(3.51)***		-0.039 (-0.25)	2.586 (1.94)				**0.530** ***(2.65)***	-2.145 (-1.33)		0.307	***(23.23)***	202
Model 5b	**0.035** ***(3.51)***			2.547 (1.91)	-0.039 (-0.25)				-1.615 (-0.996)	**0.530** ***(2.65)***	0.307	***(23.23)***	202
Model 6a	**0.034** ***(3.24)***		0.074 (0.40)	**0.956** **(2.42)***				0.382 (1.69)			0.290	***(28.4)***	202
Model 6b	**0.034** ***(3.32)***			**1.321** ***(3.67)***	-0.035 (-0.22)					**0.530** ***(2.65)***	0.298	***(29.45)***	202
Model 6c	**0.033** ***(3.72)***			**1.313** ***(3.67)***						**0.492** ***(4.84)***	0.301	***(44.37)***	202

Bold (*) indicates significance at 5 % confidence level
Italic bold (**) indicates significance at 1 % confidence level

This result gives an indication that independent directors, as such, have no effect on the differences with the sensitivity of bad news and good news reporting. The positive coefficient with (RET·INDEP) in model (4) indicates that a larger proportion of independent directors on the board could encourage rapid reaction to good news incorporation in earnings. Conversely, the coefficient on (NEG·RET·INDEP), which reflects the timeliness of bad news reporting with the effect of independent directors, is negative. These results are interesting, but statistically insignificant.

However, the results from model (5a) show in a statistically significantly manner that a larger proportion of independent directors on the board will encourage a more timely approach to good news incorporation in earnings. In addition, model (5a) can be reformulated as model (5b), where a different coefficient for positive returns with more independent directors (POS·RET·INDEP) and negative returns with more independent directors (NEG·RET·INDEP) is calculated. In model (5b) the coefficient for positive returns with more independent directors (POS·RET·INDEP = 0.530) is equal to the coefficient for (RET·INDEP) in model (5a). Moreover, the coefficient for negative returns with more independent directors (NEG·RET·INDEP) is negative (-1.651) and statistically insignificant as in model (5a). This indicates that there is no greater earnings conservatism in firms with more independent directors in the board.

The results of model (6a) show that the difference between the slope coefficients for positive returns versus negative returns (NEG·RET) is significant (0.956). It is almost similar to the differences with slope coefficients for (RET) and (NEG·RET) in models (2a) and (3). The difference between negative and positive reaction is the same, not regarding the proportion of independent directors.

The estimated coefficient of (RET·INDEP) in model (6a) equals (0.382). Though insignificant, it gives an indication that there are effects that increase the reaction on returns by (0.0382) for each 10 % of independent directors. When the proportion of independent directors is 72.5 %[27], models (2b) and (6a) give almost the same result. It is notable, that the mean of (INDEP) in the whole sample equals (0.723) which corresponds well to (0.725). These findings give support to the results obtained. Model (6a) can also be interpreted in such a way that independent directors do not cause a direct increase to market reaction but may have an indirect effect by increasing the market`s credence in the board and their reporting. Note that the coefficient for (RET) is now insignificant. This implies that when the number of independent directors is taken into account there is no overall ef-

[27] Calculated as follows: [(0.351-0.074)/0.382] = 0.725.

fect. Thus, it may be concluded that the overall impact of (RET) may be due in part to the number of independent directors.

When model (6a) is reformulated as model (6b), where a different coefficient for positive returns (POS·RET), positive returns with more independent directors (POS·RET·INDEP) and negative returns without independent directors (NEG·RET) are obtained. The results show that the coefficient for positive returns with more independent directors (POS·RET·INDEP) is (0.530). The coefficient for negative returns (NEG·RET) in model (6b) is (1.321). This indicates that the bad news is reported in a timely manner even without the effect of independent board members. However, the coefficient for positive returns without the effect of independent directors (POS·RET) is low (-0.035) and statistically insignificant. This implies that when the number of independent directors is taken into account there is no overall effect except when returns are positive.

In my final model (6c) the term (POS·RET) is set at 0. In line with model (6b), the coefficient for positive returns with more independent directors (POS·RET·INDEP) is (0.492)[28]. Moreover, the return for negative earnings in model (6c) is (1.313), and models (6b) and (6c) yield essentially the same results. Moreover, if the proportion of independent directors is at the population average (INDEP = 72.3 %) models (2a) and (6c) yield almost identical results. However, model (6c) gives parsimonious additional information and understanding on the subject.

[28] See model (6b): (POS·RET) + (POS·RET·INDEP) = (-) 0.035+ 0.530 = 0.495.

5.3. Conclusions on the Effect of Asymmetric Timeliness and Board Composition

If the board composition is not included in the model, reasonable results with R^2 about 0.28 are obtained. However, the models can be refined by introducing board composition (INDEP). This will increase fit R^2 to 0.30. With a further refinement with different models for board composition effect for negative (bad news) and positive (good news) returns, the models can be simplified without essentially losing fit, but a gain from a simpler model and easier interpretation is achieved.

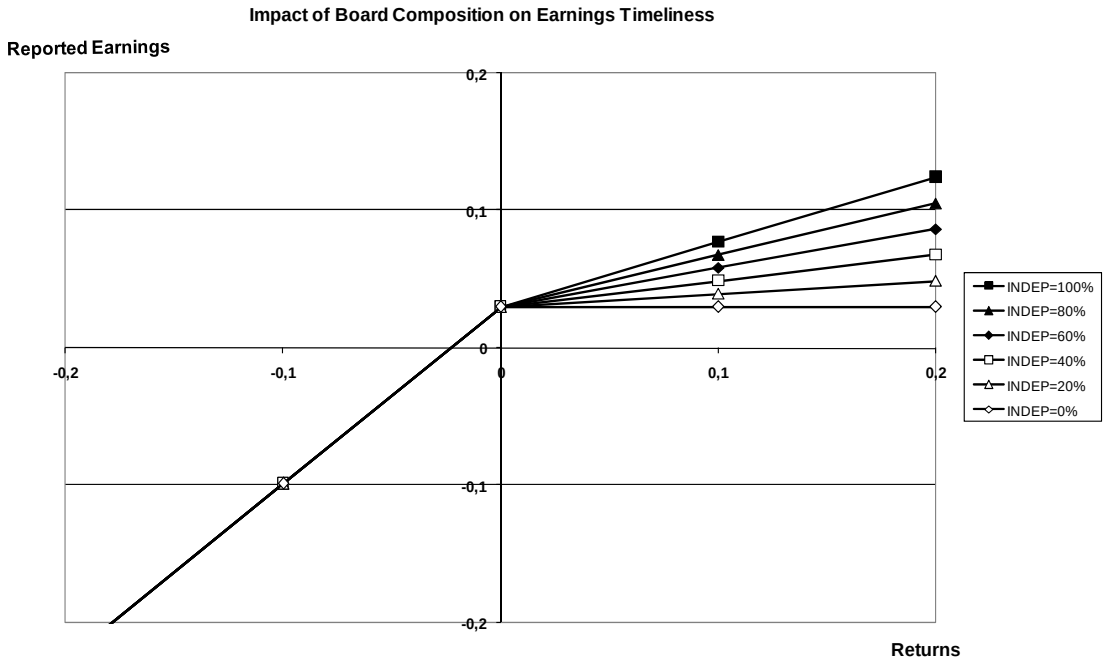

Figure 1. Impact of Board Composition on Earnings Timeliness

The final model (6c) is illustrated in Figure 1. When earnings are negative the line is deep (coefficient with 1.313) and does not depend on the number of independent directors (INDEP). In that sense, my findings are inconsistent with the findings from the UK, US and Spanish markets (Beekes et al. 2004; Ahmed & Duellman 2007; Garcia Lara et al. 2007) that the timeliness of bad news reflected in earnings is positively related to the proportion of the independent directors. Then my Hypothesis 1 is rejected.

When earnings are positive the line is gentler, starting from a vertical line when there are no independent directors on the board (i.e. INDEP = 0). It indicates that without the effect of independent

directors, the bad news (negative returns) are reflected in earnings on a more timely basis than good news (positive returns). This finding is consistent with the prior findings (Raonic et al. 2004; Bushman & Piotroski 2006 and Brown et al. 2006) with Finnish data showing that under the Basu interpretation of conservatism, Finnish listed firms report earnings in a conservative manner.

With increasing number of independent directors the line on the positive (good news) side becomes steeper but always gentler than on the negative side. This result is interesting, because it indicates that board independence increases the timeliness of good news reporting. Then, my Hypothesis 2, stating that the timeliness of good news reflected in earnings is negatively related to the proportion of independent board members, is rejected. In fact, the timeliness of good news reporting is at its maximum (coefficient 0.492), when the whole board consists of independent directors. However, the result can also be interpreted in such a way that independent directors do not cause a direct increase in market reaction to good news (positive returns) but has an indirect effect by increasing the markets' credence in the board and their reporting.

5.4. Accruals and Board Composition

To sensitively check an alternative measure to the Basu conservatism model, the Ball & Shivakumar model (2005), is tested. The estimation results for the standard Ball & Shivakumar model are given in Table 6. The reason for using an alternative measure is that concerns have been raised in about the limitations of the Basu method to measure earnings conservatism (Ryan 2006). In particular Dietrich et al. (2007) point out that portioning a regression sample with one of the regressors may produce biased inferences. However, the intuition behind the Ball & Shivakumar model is the same as in the Basu model: Accounting earnings tend to anticipate the recognition of bad news and to delay the recognition of good news (Garcia Lara et al. 2007).

The results obtained by applying the standard Ball & Shivakumar model (7) show that the relation with accruals and cash flows is negative as expected, and that the relation is statistically significant. Moreover, the positive relation with accruals and negative cash flows suggests lower asymmetry of news recognition in periods with economic losses, but this relation is statistically insignificant. In addition, the statistically insignificant dummy variable for bad news (D) in model (7) indicates that the slopes of good news and bad news intersect when (CF) is 0. In that sense, the results are in line with the Basu model.

Table 6
Coefficients, adjusted R^2 s and F-statistics from total accruals and cash flow regressions of Standard Ball & Shivakumar model

Dependent variable: ACC	δ_0	δ_1	δ_2	δ_3	δ_4			
Independent variables:	INTERCEPT	D	CF	D·CF	P·CF	Adj. R^2	F	N
Ex. Sign	(?)	(?)	(-)	(+)	(-)			
Model 7	0.019 (1.92)	-0.031 (-0.94)	**-0.510** ***(-9.59)***	0.470 (0.76)		0.219	***(19.74)***	202
Model 8	0.130 (1.25)		**-0.484** ***(-9.33)***	0.644 (1.24)		0.219	***(29.14)***	202
Model 9	0.130 (1.25)			0.160 (0.31)	**-0.484** ***(-9.33)***	0.219	***(29.14)***	202

Bold (*) indicates significance at 5 % confidence level
Italic bold (**) indicates significance at 1 % confidence level

Table 7
Coefficients, adjusted R^2 s and F-statistics of modified Ball & Shivakumar models, where total accruals and cash flow regressions and board composition is linked to using a continuous variable (INDEP) for the proportion of independent directors

Dependent variable: ACC	η_0	η_1	η_2	η_3	η_4	η_5	η_6	η_7	η_8	η_9			
Independent variables:	INTERCEPT	D	CF	D·CF	P·CF	INDEP	D·INDEP	CF·INDEP	D·CF·INDEP	P·CF·INDEP	Adj. R^2	F	N
Ex. Sign	(?)	(?)	(-)	(+)	(-)	(?)	(?)	(-)	(+)	(-)			
Model 10	-0.043 (-1.27)	-0.056 (-0.58)	-0.290 (-1.25)	0.816 (0.465)		**0.082** **(2.04)***	0.059 (0.41)	-0.286 (-1.03)	-0.367 (-0.17)		0.224	***(9.31)****	202
Model 11	-0.023 (-0.86)		**-0.488** ***(-9.35)****	0.643 (1.26)		0.050 (1.68)					0.226	***(20.60)****	202
Model 12	0.015 (1.42)			1.488 (1.09)	**-0.559** ***(-3.28)****				-1.798 (-1.08)	0.091 (0.45)	0.223	***(15.41)****	202

Bold (*) indicates significance at 5 % confidence level
Italic bold (**) indicates significance at 1 % confidence level

In order to guarantee this, in model (8) the regression coefficient δ_1 of the dummy variable (D) is set at 0. The result from model (8) confirming the finding that the relation to accruals and cash flows is negative and statistically significant, but the positive relation to accruals and negative cash flows is statistically insignificant. In that sense, the results are inconsistent with asymmetric timeliness model (2).

In model (9), the different slope coefficients of both negative and positive cash flows are estimated. In line with model (8), the slope coefficient with accruals and positive cash flows (good news) is statistically significant and similar to that in model (8)[29]. Moreover, the results from model (9) confirm that the slope coefficient with accruals and negative cash flows (bad news) are statistically insignificant. This indicates that the slope coefficient with accruals and negative cash flows is flat, giving no statistically significant evidence for the assumption that recognition of bad news in earnings, tends to be lower in periods with economic losses.

The standard Ball & Shivakumar model was then modified using a continuous variable (INDEP). The estimation results are given in Table 7. In line with the asymmetric timeliness model (4), model (10) shows that independent directors as such lower the negative association between accruals and cash flows. However, model (11) gives no statistically significant indication for that finding.

Moreover, the insignificant coefficients with negative cash flows in firms with more independent directors (D·CF·INDEP) in models (10) and (12) give an indication that there is no greater earnings conservatism in firms with more independent directors on the board. In that sense, the results are in line with the findings from asymmetric timeliness models (4) to (5b) in Table 5, but inconsistent with prior findings from the Spanish markets (Garcia Lara et al. 2007).

In addition, in model (12) the coefficient with positive cash flows with more independent directors (P·CF·INDEP) is positive but statistically insignificant. In that sense, the results are inconsistent with asymmetric timeliness models (5b), (6b) and (6c). In summary, the results from models (10) to (12) show that firms with more independent directors (INDEP) have no direct or indirect reaction to negative cash flows (bad news) or positive cash flows (good news) reporting.

[29] See models (8) and (9): 0.160 = [0.644 + (-0.484)].

6. Summary and Further Research

This study examined the link between board independence and asymmetric timeliness of earnings in a Finnish bank-oriented financial system. In asymmetric timeliness, earnings are more sensitive to bad news (negative returns) than to good news (positive returns). The incremental timeliness of bad news recognition over good news recognition is the root of Basu`s (1997) concept of earnings conservatism.

This study extends the prior research by Beekes et al. (2004), Ahmed & Duellman (2007) and Garcia Lara et al. (2007) and investigates the relationship between board composition and asymmetric timeliness of earnings in civil law regimes and capital markets, which are not commonly viewed as typically market-based. Here it is assumed that the proportion of independent directors are better able to monitor the activities of senior management influence earnings conservatism. Conversely, firms with a lower proportion of independent directors on the board are expected to exhibit less conservative tendencies. Moreover, this study retests findings reporting asymmetrically timely recognition of bad news (Raonic et al. 2004, Bushman & Piotroski 2006 and Brown et al. 2006) using Finnish data.

The models by Basu (1997) and Ball & Shivakumar (2005) are re-estimated. The Ball & Shivakumar model is entirely accounting based, but the intuition behind it is the same as in the Basu model: Because of the asymmetric recognition of news in earnings, bad news (negative cash flows) is recognized in a timely manner and recognition of good news (positive cash flows) is delayed. The results obtained using the Basu model show that bad news (negative returns) is reflected in earnings on a more timely basis than good news (positive returns). In this respect the results from Finnish data earlier are in line with findings. Instead, it was unexpectedly found, that timeliness of bad news reporting does not depend on the number of independent directors, but that the timeliness of good news reporting does. In that sense, my findings are inconsistent with the findings from the UK, US and Spanish markets (Beekes et al. 2004; Ahmed & Duellman 2007; Garcia Lara et al. 2007). In fact, the timeliness of good news reporting is at its maximum when the whole board consists of independent directors. However, the result can also be interpreted in such a way that independent directors do not cause a direct increase in the market reaction to good news (positive returns) but have an indirect effect by increasing the markets` credence in the board and their reporting.

The results from the Ball & Shivakumar model shows that inconsistently with the Basu model, the timely recognition of bad news (negative cash flows) compared to good news (positive cash flows) is statistically insignificant. However, the result from the Ball & Shivakumar model confirms the findings that there is no greater earnings conservatism in firms with more independent directors on the board. In that sense, the results are in line with the Basu model used in this study, but inconsistent with findings from the Spanish markets (Garcia Lara et al. 2007). Moreover, the Ball & Shivakumar model show, that timeliness of good news reporting does not dependent on the number of independent directors either. In summary, the results from the Ball & Shivakumar model indicate that firms with more independent directors have no direct or indirect reaction to negative cash flows (bad news) or positive cash flows (good news) reporting.

In future it would be interesting to investigate the relationship between corporate governance and asymmetric timeliness of earnings in other markets e.g. in Germany, Scandinavia or the Baltic Countries. Moreover more research is needed to take a closer look at firms assessing and recruiting independent board members, and especially what core competences firms require in independent directors. These are interesting questions which are left for future research.

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Appendix A

Sample Construction of observation with all necessary accounting and market data

Table A1
Sample selection in numbers by year

	2003	2004	2005	Total
OMX listed firms end of the year*	145	137	137	419
Foreign firms	-3	-3	-3	-9
Finnish listed firms from 2003 to 2005	142	134	134	410
Financial Services and Insurance firms	-21	-19	-18	-58
Financial Year differs from calendar year	-10	-8	-7	-25
Listed or delisted during the financial year or missing annual report data	-5	-1	-5	-11
Sample with all necessary accounting and market data	**106**	**106**	**104**	**316**
CG- reporting did not meet all the data reguirements	-82	-23	-8	-113
Influential outlier	0	-1	0	-1
Final Sample	**24**	**82**	**96**	**202**

**Nasdaq OMX (2009): Helsinki Yearly Statistics 1990-2008*

Table A1 serves as a summary by year of, how the sample with all necessary accounting and market data is obtained. Table A2 panel A lists the firms, which are excluded from the sample because of being non-Finnish. In addition, Table A2 panel B show which firms are eliminated because of being financial services and insurance industries. Moreover, Table A2 panel C shows the firms, which are excluded because the financial year differs from the calendar year. Finally, Table A2 panel D lists the firms which are listed or delisted during the financial year in question or with missing annual report data.

Table A2
Firms excluded from the sample

(A) Foreign firms

	2003	2004	2005
1	Nordea	Nordea	Nordea
2	OMHEX (OMX)	OMX (OMHEX)	OMX (OMHEX)
3	TeliaSonera	TeliaSonera	TeliaSonera

(B) Financial Services and Insurance firms

	2003	2004	2005
1	Amanda Capital	Amanda Capital	Amanda Capital
2	CapMan	CapMan	CapMan
3	Citycon	Citycon	Citycon
4	eQ	eQ	eQ
5	Interavanti	Interavanti	Interavanti
6	J. Tallberg-Kiinteistöt	J. Tallberg-Kiinteistöt	J. Tallberg-Kiinteistöt
7	Menire (Turvatiimi)	Menire (Turvatiimi)	Turvatiimi (Menire)
8	Neomarkka	Neomarkka	Neomarkka
9	Norvestia	Norvestia	Norvestia
10	OKO	OKO	OKO
11	Panostaja	Panostaja	Panostaja
12	Pohjola-Yhtymä	Pohjola-Yhtymä	Pohjola-Yhtymä
13	Polar Kiinteistöt	Ruukki Group	Ruukki Group
14	Ruukki Group	Sampo	Sampo
15	Sampo	Sponda	Sponda
16	Sponda	SSK	SSK
17	SSK	Technopolis	Technopolis
18	Technopolis	Turun Arvokiinteistöt	Ålandsbanken
19	Turun Arvokiinteistöt	Ålandsbanken	
20	Ypankki Skop		
21	Ålandsbanken		

(C) Financial year differs from calendar year

	2003	2004	2005
1	Efore	Efore	Efore
2	Kone	Kone	Kone
3	Plandent	Plandent	Suomen Helasto
4	Rapala VMC	Suomen Helasto	Puuharyhmä
5	Sentera	Tervakosken Puuhamaa	Turkistuottajat
6	Suomen Helasto	Turkistuottajat	Vaahto Group
7	Tervakosken Puuhamaa	Vaahto Group	Viking Line
8	Turkistuottajat	Viking Line	
9	Vaahto Group		
10	Viking Line		

(D) Annual Report data missing or firm is listed or delisted during the financial year

	2003	2004	2005
1	Eimo	Kemira GrowHow	Neste Oil
2	Hackman		Cargotec
3	Instrumentarium		AffectoGenimap
4	Janton		Alma Media
5	Novo Group		Saunalahti Group

Appendix B

Board independence reporting in Finnish listed firms 2003 – 2005

This appendix presents information on, how the board of directors` independence is reported in Finnish listed firms during the period 2003 – 2005. The sample covers the 316 firm year observations with all necessary accounting and market data (see Appendix A). Covering the implementation of Corporate Governance (CG) Code 2003 and of board independence reporting, the reporting practices are divided into the following eight categories:

1. The board members` independence is evaluated according to the CG Code 2003. Evaluation found in the annual report or firm`s web pages.

2. The firm reports that it complies with the CG Code 2003. However, the board members` independence is reported only in web pages and for the year in question, it can no longer be verified.

3. The firm reports that it complies with the CG Code 2003, but the evaluation of board members` independence is not found in the annual report.

4. The firm explains that it does not follow CG Code 2003 to its full extent but it is unclear, which of directors are independent and which are not.

5. The firm reports that the implementation of CG Code 2003 is in process, but so far the firm follows the earlier code, CG - Code 1997.

6. The firm explains that the implementation of CG Code 2003 is in process.

7. The firm reports that it follows CG Code 1997 or firm`s own governance principles.

8. There is no reference to CG reporting.

Tables B1 to B3 show the results by financial year. Only the firms` in category 1 (bold face in Tables) are adopted in this study. The abbreviation AR refers to Annual Report and term REFERENCE indicate the source(s) where the evaluation of board independence is found.

Table B1. Board Independence reporting in financial year 2003

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Aldata Solution							x		AR 2003, p.29
Alma Media		x							AR 2003, p. 46 and firm´s web pages 22.3.06
Amer			x						AR 2003, p. 70
Aspo							x		AR 2003, p. 43
Aspocomp Group	x								AR 2003, p. 10
Atria								x	-
Basware							x		AR 2003, p. 11
Beltton							x		AR 2003, p. 34
Benofon								x	-
Biohit	x								AR 2004, p. 20
Biotie Therapies								x	-
Birka Line								x	-
Chips								x	-
Componenta							x		AR 2003, p. 3 and firm´s web pages 31.7.06
Comptel	x								AR 2003, p. 52
Done Solutions								x	-
Elcoteq	x								AR 2005, p. 75-76 and 79
Elecster								x	-
Elektrobit								x	-
Elisa								x	-
Endero			x						AR 2003, p. 14
Espoon Sähkö (E.ON Finland)								x	-
Etteplan							x		AR 2003, p.15
Evia	x								AR 2003, p. 14
Evox Rifa Group								x	-
Exel	x								AR 2003, p. 13-14
Finnair		x							AR 2003, p. 18
Finnlines							x		AR 2003, p. 48
Fiskars					x				AR 2003, p. 39
Fortum	x								AR 2003, p. 39
F-Secure						x			AR 2003, p. 11
HK Ruokatalo				x					AR 2003, p. 55
Honkarakenne								x	-
Huhtamäki	x								AR 2003, p. 27-28
Ilkka-Yhtymä								x	-
Incap					x				AR 2003, p. 45
Jaakko Pöyry Group								x	-
Kasola							x		AR 2003, p. 4
KCI Konecranes	x								AR 2003, p. 55
Kekkilä								x	-
Kemira						x			AR 2003, p. 39
Keskisuomalainen					x				AR 2003, p. 10
Kesko							x		AR 2003, p. 49-50
Kesla								x	-
Kylpyläkasino								x	-
Kyro					x				AR 2003, p. 51
Larox								x	-
Lassila & Tikanoja								x	-
Lemminkäinen	x								AR 2003, p. 62
Leo Longlife								x	-
Lännen Tehtaat								x	-

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Marimekko							x		AR 2003, p. 43
Martela							x		AR 2003, p. 36
Metso	x								AR 2003, p. 44-45
M-real							x		AR 2003, p. 21
Nokia	x								AR 2003, p. 63
Nokian Renkaat					x				AR 2003, p. 75
Nordic Aluminium								x	-
Okmetic								x	-
Olvi						x			
Orion	x								AR 2003, p. 16
Outokumpu	x								AR 2003, p. 92
Perlos							x		AR 2003, p. 42 ja 45
PKC Group							x		AR 2003, p. 42
PMJ Automec (Cencorp)			x						Web annual report 2003
Pohjois-Karjalan Kirjapaino								x	-
Ponsse								x	-
Proha								x	-
QPR Software								x	-
Raisio	x								AR 2003, p. 57
Rakentajain Konevuokraamo								x	-
Ramirent								x	-
Rautaruukki			x						AR 2003, p. 26-27 and 30
Raute							x		AR 2003, p. 42
Rocla			x						AR 2003, p. 46
SanomaWSOY	x								AR 2003, p. 32
Satama Interactive						x			Firm´s web pages 8.7.2006
Saunalahti Group							x		AR 2003, p. 40
Scanfil								x	-
Solteq								x	-
SSH Communication Securities	x								AR 2003, p. 40-41
Stockmann	x								AR 2003, p. 10
Stonesoft					x				AR 2003, p. 16
Stora Enso	x								AR 2003, p. 38
Stromsdal								x	-
Suomen Spar						x			AR 2003, p. 3 ja 17
Suominen Yhtymä								x	-
Sysopen	x								AR 2003, p. 16
Talentum							x		AR 2003, p. 16
Tamfelt						x			AR 2003, p. 10-11 and 14
Tamro							x		Web annual report 2003, 12.2.07
Tecnomen			x						AR 2003, p. 22, 48 & firm´s web pages 15.11.06
Tekla							x		AR 2003, p. 6
Teleste							x		AR 2003, p. 8
TietoEnator					x				AR 2003, p. 36
Tieto-X							x		AR 2003, p. 12
TJ- Group						x			AR 2003, p. 14 and firm´s web pages 17.1.07
Tulikivi			x						AR 2003, p. 17
UPM-Kymmene	x								AR 2003, p. 91
Uponor	x								AR 2003, p. 51
Vacon			x						AR 2003, p. 22
Vaisala								x	-
Wärtsilä	x								AR 2003, p. 29
YIT	x								AR 2003, p. 103
Yleiselektroniikka								x	-
Yomi			x						AR 2003, p. 18

Table B2. Board Independence reporting in financial year 2004

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Aldata Solution	x								AR 2004, p. 47
Alma Media	x								AR 2004, p. 47-48
Amer	x								AR 2004, p. 86
Aspo	x								AR 2004, p. 25
Aspocomp Group	x								AR 2004, p. 58
Atria	x								AR 2004 p.7 and firm´s web pages 8.11.05
Basware	x								AR 2004 p.20 and firm´s web pages 8.11.06
Beltton	x								AR 2004, p. 36
Benofon	x								Firm´s web pages 9.11.05
Biohit	x								AR 2004, p. 20
Biotie Therapies	x								Firm´s web pages 9.11.05
Birka Line	x								AR 2004, p. 40
Chips			x						AR 2004, p. 34
Componenta	x								AR 2004, p. 6
Comptel	x								AR 2004, p. 54
Done Solutions								x	-
E.ON Finland (Espoon Sähkö)				x					AR 2004 p.40
Elcoteq Network	x								AR 2004 p. 69
Elecster		x							Firm´s web pages 12.11.05
Elektrobit	x								Firm´s web pages 12.11.05
Elisa	x								AR 2004, p. 53
Endero	x								AR 2004, p. 11
Etteplan	x								AR 2004, p. 35
Evia	x								AR 2004, p. 19
Evox Rifa Group		x							Firm´s web pages 19.11.05
Exel	x								AR 2004, p. 15
Finnair	x								AR 2004, p. 20
Finnlines	x								AR 2004, p. 47 & 50
Fiskars	x								AR 2004, p. 41
Fortum	x								AR 2004, p. 42
F-Secure	x								AR 2004 p.11 and firm´s web pages 24.11.05
HK Ruokatalo				x					AR 2004, p. 54
Honkarakenne	x								AR 2004, p. 20
Huhtamäki	x								AR 2004, p. 31
Ilkka-Yhtymä		x							AR 2004 p.13 and firm´s web pages 5.12.05
Incap	x								AR 2004, p. 41
Jaakko Pöyry Group	x								AR 2004, p. 5 and 31
Kasola						x			AR 2004, p. 4
KCI Konecranes	x								AR 2004, p. 27
Kekkilä			x						AR 2004, p. 38
Kemira	x								AR 2004, p. 38
Keskisuomalainen	x								AR 2004, p. 40
Kesko	x								AR 2004, p. 61-62
Kesla	x								AR 2004, p. 24
Kylpyläkasino								x	-
Kyro	x								AR 2004, p. 51
Larox	x								AR 2004, p. 30
Lassila & Tikanoja	x								AR 2004, p. 48
Lemminkäinen	x								AR 2004, p. 62
Leo Longlife	x								AR 2004, p. 9
Lännen Tehtaat						x			AR 2004 p. 57 and firm´s web pages 12.12.05

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Marimekko	x								AR 2004, p. 20
Martela	x								AR 2004, p. 36
Metso	x								AR 2004, p. 50-51
M-real		x							Firm´s web pages 12.12.05
Nokia	x								AR 2004, p. 62
Nokian Renkaat	x								AR 2004, p. 76
Nordic Aluminium	x								Web annual report 2004, 15.12.05
Okmetic	x								AR 2004, p. 50-51
Olvi		x							Firm´s web pages 15.12.05
Orion	x								AR 2004, p. 64
Outokumpu	x								AR 2004, p. 117
Perlos		x							AR 2004, p. 40
PKC Group	x								AR 2004, p. 55
PMJ Automec (Cencorp)		x							Firm´s web pages 18.8.06
Pohjois-Karjalan Kirjapaino	x								AR 2004, p. 46
Ponsse	x								AR 2004, p. 54
Proha	x								AR 2004, p. 5
QPR Software		x							Firm´s web pages 27.12.05
Raisio	x								AR 2004, p. 41
Rakentajain Konevuokraamo	x								AR 2004, p. 28
Ramirent	x								AR 2004, p. 19-20
Rapala VMC		x							Firm´s CG- statement in web 15.12.05
Rautaruukki	x								AR 2004, p. 39
Raute	x								AR 2004, p. 41
Rocla	x								AR 2004, p. 44-45
SanomaWSOY	x								AR 2004, p. 41
Satama Interactive	x								AR 2004, p. 34-35
Saunalahti Group	x								AR 2004, p. 39
Scanfil		x							Web annual report 2004, 29.12.05
Sentera	x								AR 2004, p. 24
Solteq		x							AR 2004, p. 28
SSH Communication Securities	x								AR 2004, p. 21-22
Stockmann	x								AR 2004, p. 31
Stonesoft	x								AR 2004, p. 11
Stora Enso	x								AR 2004, p. 32
Stromsdal	x								AR 2004, p. 38
Suomen Spar	x								AR 2004, p. 20
Suominen Yhtymä	x								AR 2004, p. 49
Sysopen	x								AR 2004, p. 16
Talentum		x							AR 2004 p. 6 and firm´s web pages 29.12.05
Tamfelt	x								AR 2004, p. 12
Tecnomen	x								AR 2004, p. 26
Tekla		x							AR 2004, p. 10 ja firm´s web pages 3.1.06
Teleste	x								AR 2004, p. 20
TietoEnator	x								AR 2004, p. 52-53
Tieto-X	x								AR 2004, p. 35
TJ- Group						x			AR 2004, p. 10 ja firm´s web pages 3.1.06
Tulikivi	x								AR 2004, p. 17
UPM-Kymmene	x								AR 2004, p. 106
Uponor	x								AR 2004, p. 60
Vacon	x								AR 2004, p. 26
Vaisala	x								AR 2004, p. 25
Wärtsilä	x								AR 2004, p. 34-35
YIT	x								AR 2004, p. 99
Yleiselektroniikka								x	-

Table B3. Board Independence reporting in financial year 2005

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Aldata Solution	x								AR 2005, p. 67
Amer Sports	x								AR 2005, p. 101
Aspo	x								AR 2005, p. 29
Aspocomp Group	x								AR 2005, p. 70
Atria	x								AR 2005, p. 7 and firm´s web pages 27.6.06
Basware	x								AR 2005, p. 19
Beltton	x								AR 2005, p. 38
Benefon	x								Firm´s web pages 30.6.06
Biohit			x						AR 2005, p. 23
Biotie Therapies	x								AR 2005, p. 18
Birka Line	x								AR 2005, p. 54
Cencorp (PMJ Automec)	x								Firm´s CG- statement in web, page 4.
Componenta	x								AR 2005, p. 12
Comptel	x								AR 2005, p. 64
Done Solutions	x								AR 2005, p. 54
E.ON Finland (Espoon Sähkö)				x					AR 2005, p. 60
Elcoteq	x								AR 2005, p. 75 and 79
Elecster	x								AR 2005, p. 5
Elektrobit	x								Firm´s web pages 30.6.06
Elisa	x								AR 2005, p. 70
Endero	x								AR 2005, p. 15
Etteplan	x								AR 2005, p. 50
Evia	x								AR 2005, p. 37
Evox Rifa Group	x								AR 2005, p. 18 and firm´s web pages 19.11.05
Exel	x								AR 2005, p. 20 and 69
Finnair	x								AR 2005, p. 65
Finnlines	x								AR 2005, p. 74
Fiskars	x								AR 2005, p. 64
Fortum	x								AR 2005, p. 50
F-Secure	x								AR 2005, p. 37
HK Ruokatalo				x					AR 2005, p. 70 and firm´s web pages 13.6.06
Honkarakenne	x								AR 2005, p. 17-18
Huhtamäki	x								AR 2005, p. 29
Ilkka-Yhtymä	x								AR 2005, p. 17 and firm´s web pages 5.12.05.
Incap	x								AR 2005, p. 59
Jaakko Pöyry Group	x								AR 2005, p. 39
Kasola	x								AR 2005, p. 6 and firm´s web pages 7.12.05.
KCI Konecranes	x								AR 2005, p. 28
Kekkilä			x						Firm´s CG- statement 2005, p. 2-3
Kemira	x								AR 2005, p. 40-41
Kemira GrowHow	x								AR 2005, p. 26
Keskisuomalainen	x								AR 2005, p. 63
Kesko	x								AR 2005, p. 42
Kesla	x								AR 2005, p. 21-22
Kylpyläkasino		x							Firm´s web pages 6.9.06
Kyro	x								AR 2005, p. 75 and 79
Larox	x								AR 2005, p. 72
Lassila & Tikanoja	x								AR 2005, p. 71
Lemminkäinen	x								AR 2005, p. 52
Leo Longlife	x								AR 2005, p. 8
Lännen Tehtaat	x								AR 2005, p. 94

COMPANY	1	2	3	4	5	6	7	8	REFERENCE
Marimekko	x								AR 2005, p. 27
Martela	x								AR 2005, p. 17
Metso	x								AR 2005, p. 62-63.
M-real	x								AR 2005, p. 88-89.
Nokia	x								AR 2005, p. 68
Nokian Renkaat	x								AR 2005, p. 41 and 45.
Nordic Aluminium	x								AR 2005, p. 2
Okmetic	x								AR 2005, p. 59
Olvi	x								Firm´s CG- statement in web, 15.12.06
Orion	x								AR 2005, p. 17
Outokumpu	x								AR 2005, p. 111
Perlos			x						AR 2005, p. 80
PKC Group	x								AR 2005, p. 74-75
Pohjois-Karjalan Kirjapaino	x								AR 2005, p. 66
Ponsse	x								AR 2005, p. 96-97
Proha	x								AR 2005, p. 11-12
QPR Software	x								AR 2005, p. 6 and firm´s CG- statement in web, 27.12.05
Raisio	x								AR 2005, p. 54
Rakentajain Konevuokraamo	x								AR 2005, p. 49
Ramirent	x								AR 2005, p. 81-82
Rapala VMC	x								AR 2005, p. 56-57 and firm´s CG- statement in web, p. 3
Rautaruukki	x								AR 2005, p. 38
Raute	x								AR 2005, p. 71
Rocla	x								AR 2005, p. 68
SanomaWSOY	x								AR 2005, p. 72
Satama Interactive	x								AR 2005, p. 19
Scanfil	x								Web annual report 2005, 29.12.05
Sentera	x								AR 2005, p. 47
Solteq	x								AR 2005, p. 15 and firm´s web pages 29.12.05
SSH Communication Securities	x								AR 2005, p. 21-22
Stockmann	x								AR 2005, p. 10
Stonesoft	x								AR 2005, p. 9
Stora Enso	x								AR 2005 (Group), p. 30
Stromsdal	x								AR 2005, p. 22
Suomen Spar	x								AR 2005, p. 13
Suominen Yhtymä	x								AR 2005, p. 60
SysOpen Digia	x								AR 2005, p. 18
TJ- Group						x			AR 2005, p. 8 and firm´s web pages 14.1.07
Talentum	x								AR 2005 p. 30 and firm´s web pages 29.12.05
Tamfelt	x								AR 2005, p. 10
Tecnomen	x								AR 2005, p. 16
Tekla	x								AR 2005, p. 62
Teleste	x								AR 2005, p. 23
Tieto-X	x								AR 2005, p. 43
TietoEnator	x								AR 2005, p. 58-59
Tulikivi	x								AR 2005, p. 19
UPM-Kymmene	x								AR 2005, p. 118-119
Uponor	x								AR 2005, p. 53
Vacon	x								AR 2005, p. 24
Vaisala	x								AR 2005, p. 38
Wärtsilä	x								AR 2005, p. 37
YIT	x								AR 2005, p. 64-65
Yleiselektroniikka				x					AR 2005, p. 4